IN THE DISTRICT COURT OF THE UNITED STATES FOR THE MIDDLE DISTRICT OF ALABAMA, EASTERN DIVISION,

B. B. a minor, by and)
through his mother and next friend,	
OWENA KNOWLES,)
Plaintiff,)
V.) Civil Action No.: 3:06cv715-MHT
PAWN CITY, INC.; INTERSTATE	
ARMS CORPORATION; NORINCO	
a/k/a CHINA NORTH INDUSTRIES	
CORPORATION, QIQIHAR HAWK	
INDUSTRIES, et al.,	
)
Defendants.)

PLAINTIFF'S RULE 26 DISCLOSURES

Comes now the plaintiff and pursuant to the Court's Uniform Scheduling Order, submits his Rule 26 information regarding the expert witnesses he expected to use at the trial of this case.

1. John T. Butters, P.E. Engineering Consultants, Inc. 158 Cook Lane Center Point, TX 78010 (830) 634-7250

> Mr. Butters' preliminary report and opinion and Curriculum Vitae are attached hereto.

Joseph M. Miller 2.

> Mr. Miller will testify regarding the diminished vocational capacity of Plaintiff as a result of his injuries.

- 3. William E. Hardy, Jr., Ph.D., J.D.
 - Mr. Hardy will testify regarding the economic damages and loss of future earnings suffered by Plaintiff due to his diminished vocational capacity. Mr. Hardy's Curriculum Vitae is attached hereto.
- 4. The following persons are not expert witnesses, but are treating physicians of the Plaintiff. They will be expected to testify about the injuries sustained by the Plaintiff and the treatment rendered in relation thereto. Said medical care providers are also expected to testify as to future medical needs, and as to the reasonable and necessary medical expenses associated with treatment rendered:
 - (a) Plaintiff's treating physicians whose depositions have been or will be taken;
 - (b) Dr. Sudin, Kirklin Clinic
 - (c) Dr. Long, Kirklin Clinic
 - (d) Dr. Martin, Lanier Memorial Hospital

Plaintiff reserves the right to supplement his Rule 26 information. Defendant Norinco has requested and received an extension for their response to discovery and Plaintiff may supplement with other experts after reviewing Norinco's discovery responses.

/s David J. Hodge

David J. Hodge Of Counsel for Plaintiff

OF COUNSEL:

PITTMAN, DUTTON, KIRBY & HELLUMS, P.C. 2001 Park Place North 1100 Park Place Tower Birmingham, Alabama 35203 (205) 322-8880 (205) 328-2711 facsimile

Nick Wooten, Esq. WOOTEN & CARLTON, P.C. P.O. Drawer 290 Lafayette, Alabama 36862

CERTIFICATE OF SERVICE

I hereby certify that on the 27th day of December, 2006, I electronically filed the foregoing with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the following: All counsel of record.

I hereby further certify that I have mailed by United States Postal Service the document to the following non-CM/ECF participants:

Qiqihar Hawk Industries 15 Nanyuan Road Qiqihar, Heilong Jiang Proy Peoples Republic of China

/s David J. Hodge

David J. Hodge Of Counsel for Plaintiff

JOHN T. BUTTERS (TOM)
REGISTERED PROFESSIONAL ENGINEER

c/o Engineering Consultants, Inc. 158 Cook Lane

Center Point, Texas 78010-9742 (830) 634-7250 Telephone (830) 634-7240 Facsimile

e-mail: engrconsinc@starband.net

MEMBER:

NSPE, TSPE, SAE, NAFE, ASSE, ASME

EDUCATION:

B.S., Electrical Engineering, Southern Methodist University, 1960

B.A., Economics, Duke University, 1954

Special courses taken:

. The Foxboro Co., Industrial Instrumentation Course (3 months)

. Air Force Navigation Training . FAA Air Route Traffic Control

. Private Pilot, Multi-Engine Rated, Instrument Rated

PERSONAL:

Date of Birth:

October 24, 1932

Place of Birth:

New York, New York

Marital Status:

Married, 3 children

MILITARY SERVICE:

U.S. Air Force, June 1954 to October 1956

Rank: 1st Lieutenant

Duties: Air Traffic Control Officer, NATO

Liaison with Icelandic CAA

Schools: Air Traffic Control, Will Rogers Field, Oklahoma City, Oklahoma

EXPERIENCE:

Aug. 1985 to Present

Valley Aero, Inc., Owner and Chief Executive Officer

Engaged in design and modification of general aviation aircraft under FAA

approved certification.

May 1977 to Present

Consulting Engineer in private practice.

President and owner of Engineering Consultants, Inc.

Duties: Investigate product and design failures and provide technical assistance

and expert opinion to interested parties involved in these cases.

John T. Butters Page 2

EXPERIENCE (cont.):

Oct. 1976 to Apr. 1977

Rowan Drilling Co., Anchorage and Prudhoe Bay, Alaska

Title: Rig Technician

Duties: Maintain all electrical apparatus and assist with mechanical maintenance on turbine electrical oil drilling rigs above the Arctic Circle at Prudhoe Bay, Alaska. Equipment maintained on each rig included three 1,000 HP International Harvester Solar dual fuel turbines with EMD 750 KW brushless synchronous generators, Baylor Co., Series 1100 SCR Controls, seven GE 500 HP dc traction motors, two 120 HP Clayton steam generators, one 100 KW and two 200 KW Caterpillar diesel/ EMD auxiliary generators and all the AC and DC switchgear, controls, communication, lighting, cabling, and support equipment for a fifty-man self-sufficient camp and drilling rig complex operating in a sub arctic environment. Assist on an as-needed basis in similar duties for two diesel-mechanical oil drilling rigs at the same location.

Aug. 1974 to Sept. 1976

Texas State Technical Institute, Rio Grande Campus, Harlingen, Texas

Title: Instructor

Duties: Engineering instructor in Vocational Technical Junior College. Subjects taught include Pulse and Digital Circuits, Semiconductor Devices and Networks, Instrumentation and Controls, Machine Design, Hydronics and Water Analysis for Air Conditioning Systems, Quality Control and Technical Writing

Oct. 1966 to Feb. 1971

LTV Electrosystems, Inc., now "E" Systems, Inc.

Title: Electronic Systems Engineer

And

June 1972 to June 1974

Duties: Design, build, test and put into data processing equipment of a digital nature. Responsible for documentation and purchasing of parts and write-up of operation of equipment. Operate and service test equipment during extended test program involving environmental and other tests. Subject of major project responsibility is company confidential. Assistant to test equipment section head with responsibility for a major project. Design, document and supervise the building and testing of an automated digital test facility for a complex rf-digital system. Design, document and encode test procedures for computer controlled test facilities of a company confidential nature. Performed dynamic response and strength analysis of high speed differential gear sets for F-15 controls actuator package and did work on electromechanical and hydraulic mechanisms for the F-15, Lockheed 1011 and SST controls.

Feb. 1971 to May 1972

F&M Systems Co.

Title: Senior Engineer

Duties: Design, document and build electronic equipment and mechanical support systems. Perform technical analyses of system and component environmental and specification compatibility and feasibility and implement the results of those studies. Write proposals for complex radio frequency switching matrices and their support systems, computer buffer systems and logic displays. Worked as a member of a specially selected troubleshooting team to successfully redesign and recoup a failing multi-million dollar r-f switching matrix project. Designed mechanical portion of a complex shipboard collision avoidance radar project with responsibilities for vibration, shock and environmental survivability.

John T. Butters Page 3

EXPERIENCE (cont.):

Nov. 1965 to Oct.

Geotech Division of Teledyne, Inc.

1966

Title: Design Engineer

Duties: Production redesign of parts of long period vertical seismometer with responsibility for documentation of complete seismometer for production. Wrote operations manual for maintenance and use.

Performed same job for high sensitivity tilt measuring system capable of measuring a tilt as small as .02 arc second.

Redesigned an oxygen-acetylene seismic noise source generator for offshore subbottom strata mapping. Took Shell Oil Company prototype sketches and built, tested and documented the device and made it a working system. Was responsible for purchasing, engineering, testing and installation. Project budget approximately \$250,000 spent over nine-month period from February 1966 to October 1966.

July 1964 to Oct. 1965

Frito-Lay

Title: Project Engineer

Duties: Planning, scheduling, financing and execution of processing equipment. Accomplished original design of electro-mechanical systems incorporating purchased sub-assemblies such as metal detectors and color measuring devices. Designed a control system for a major food product processing line and a tramp metal detection system. Have run test programs on color measuring devices, designed numerous small mechanisms associated with the counting, sorting, handling and processing of food products. Two of these are a cookie docker-roller and cutter and an oiling and spicing machine for a new food product. Responsible for rewriting and re-electrification of Frito-Lay research and pilot lines facilities. A major product responsibility was company confidential at the time and was the design liaison with Raytheon, Inc. of a \$200,000 microwave potato chip cooker line which involved new techniques in processing. This was completed in mid October 1965.

Feb. 1962 to June 1964

UNIVAC

Title: Design Engineer

Duties: Design, test and analyze parts and mechanisms for high speed business data processing machinery. Designed speed controls for high speed document sorters and printers. Had prime responsibility for skins and covers and control for Univac original document processor. Designed and developed an "on-line" demand printer to print alpha-numeric information on OCR characters on assorted sizes of checks at the rate of 40 per second. Designed a vacuum shut-off valve for the document feeder system with a fully open-to-closed operate time of 12 milliseconds. Analyzed failed parts in source data encoder and redesigned for reliability. Designed high speed (1600 F.P.M. pitch line velocity) dry lubricated speed increaser planetary gear set. Adapted OCR camera system for high speed punch unit, making it a "demand" reader-punch. Supervised two engineers and up to twelve draftsmen and four technicians required by the project.

John T. Butters Page 4

EXPERIENCE (cont.):

July 1960 to Jan. 1962

The Foxboro Company

Title: Assistant Branch Factory Manager

Duties: Scheduled production, designed special test equipment, conducted special tests and troubleshooting on installation problems, both inside and outside a branch assembly plant for a large industrial instrumentation equipment manufacturer. The job required extensive contact with a large variety of customers using industrial instrumentation.

Nov. 1960 to Nov. 1970

Texas Instruments and LTV Electrosystems

Title: Technical Instructor

Duties: Taught basic engineering subjects from basic math and slide rule through transients in linear systems to technicians and engineers in evening training program. Taught basic digital logic, machine design and electronics for technicians for LTV and Dallas Independent School District and Dallas Junior College District.

June 1960 to Aug. 1960

Lloyd J. Wolf and Son, Design and Production

Engineer for consulting and manufacturing firm engaged in manufacture of lightweight, high payload van and float type trailers for highway use and construction equipment transportation. Engaged in industrial material transport and conveyor system design for mosaic tile company and redesign of hydraulic electric yacht controls.

Aug. 1957 to Jan. 1959

Magnolia Pipe Line Company

Title: Engineering Assistant

Duties: Assisted senior electrical engineers with drafting and routine work in communications and electrical section and in corrosion protection system. Assisted in design of pipeline controls including annunciator panels, pump station switch gear and wiring. Assisted in design of supervisory control systems and preparation of specifications for a major microwave communication system.

Engineering Consultants, Inc.

158 Cook Lane, Center Point, Texas, 78010, 830-634-7250

12 January, 2007

Mr. David Hodge Pittman, Dutton, Kirby & Hellums, P.C. 1100 Park Place Tower Birmingham, AL 35203

Re: Brian Bonner Firearms Injury

Dear Mr. Hodge:

In response to your request for augmentation of my resume concerning my experience with regard to firearms, I offer the following:

I became interested in firearms in the mid-1940's. To my knowledge, there are no publicly offered courses that specifically teach firearms design. There are courses in gunsmithing and repair, but these do not address the kinematics of trigger mechanisms and safety devices nor do they address gun designs using advanced physics and applied engineering technology. I acquired my knowledge of firearms and trigger mechanism designs in the same manner as other engineers who focus their attention exclusively in gun design: by studying, modifying, and generating innovative solutions to problems presented by firearms designs in general.

Both engineers who work for firearms companies, and I, started with similar academic backgrounds and interests. The studies that they pursued, and have been paid to pursue, I have largely performed on my own, aided over the last 15-20 years by materials obtained in discovery from firearms manufacturers.

As early as 1960, I was engaged in the design of fire control systems not only for my own use, but potentially for public sale. Among those firearms for which I designed and fabricated safety and firing mechanisms were the U.S. Springfield Model of 1903, the U.S. Enfield Model of 1917, the German Model 98, FN Model of 1950, and the Anschutz 1400 series for which I designed and built an electric trigger system.

Numerous other minor projects involved studies of products of most major U.S. manufacturers to include colt, Smith and Wesson, Remington, Ruger, Thompson Center and Winchester. In February, 2000, I was awarded, along with Mr. Jack Belk, a United States Patent for a passive automatic safety applicable to firearms with a sear and hammer mounted on a common trigger plate or base.

All of these efforts required that I address the safety, technical practicability, and economic feasibility of the existing designs and my proposed modifications and substitutions. The analyses and activities required the application of not only my academic background, but hands-on knowledge acquired by personal experience in the field, on the target range, and in my machine shop.

Very Truly Yours,

ENGINEERING CONSULTANTS, INC.

John T. Butters, P.E.

William E. Hardy, Jr., Ph.D., J.D.

Associate Dean and Professor Auburn University

EXPERIENCE

June 1, 2001 - Present

Associate Dean for Instruction, College of Agriculture, Auburn University, Alabama 36849; Phone: (334) 844-5620; Fax: (334) 844-4814; e-mail address: whardy@acesag.auburn.edu

January 1, 2000 - - May 31, 2001

Interim Associate Dean for Instruction, College of Agriculture, Auburn University

September 1, 1983 - Present

Professor of Agricultural Economics, Auburn University

July 1, 1992 - March 18, 1994

Coordinator, Teaching Enhancement Activities, Auburn University.

July 1, 1977 - August 31, 1983

Associate Professor of Agricultural Economics, Auburn University.

November 1, 1972 - June 30, 1977

Assistant Professor of Agricultural Economics, Auburn University.

Summer, 1972

Operations Research Analyst, Headquarters Tactical Air Command, USAF, Langley AFB, Virginia June, 1968 - June, 1972

Research Assistant in Agricultural Economics, Virginia Polytechnic Institute and State University

EDUCATION

Institution	<u>Dates</u>	Degree	<u>Major</u>
Jones School of Law	1994-1997	J.D.	Admitted to Alabama Bar
		cum laude	May, 1998
Virginia Polytechnic Institute			
and State University	1970-1972	Ph.D.	Agricultural Economics
Virginia Polytechnic Institute			
and State University	1968-1970	M.S.	Agricultural Economics
Virginia Polytechnic Institute			
and State University	1964-1968	B.S.	Agricultural Economics

PROFESSIONAL AFFILIATIONS

Alabama Bar Association Lee County Bar Association

American Academy of Economic and Financial Experts

(Charter Member)

National Association of Forensic Economists

Southern Agricultural Economics Association

Co-Secretary/Treasurer, 1990-96

Southeast Decision Sciences Institute

Council, 1993-1995

Past President, 1991-92

President, 1990-91

President Elect, 1989-90

Program Chairman, 1988-89

Council, 1984-85; 1985-86

Vice President, 1979-82; 1983-84

Secretary, 1977-78

WILLIAM E. HARDY, JR. Page 2

HONORS AND AWARDS

Sigma Xi - Research Honorary
Alpha Zeta - Agricultural Honorary
Gamma Sigma Delta - Agricultural Honorary
President, Alabama Chapter, 1982-83
President-Elect, Alabama Chapter, 1981-82

Who's Who Among America's Teachers, 2004

Alpha Gamma Rho--Honorary Member (inducted 2002)

Undergraduate Teaching Excellence Award, Auburn University Alumni Association, March 2, 2001

Faculty Honoree, Camp War Eagle, Summer 2000

Mortar Board Favorite Educator, Winter 1999

Teaching Award of Merit, National Association of Colleges and Teachers of Agriculture, 1989

Professor of the Decade, 1985-1995, Auburn University College of Agriculture Alumni Award

Outstanding Teacher, College of Agriculture, 1989, 1995 and 2004

Phi Eta Sigma - Honorary Member (inducted 1987)

Dean's Award for Teaching Excellence, College of Agriculture, Auburn University, 1987

Outstanding Achievement Award for Best Theoretical/Empirical Research Paper at 1987 Annual Meeting of Southeast Decision Sciences Institute.

Nominated for Auburn University Burlington Northern Foundation Faculty Achievement Award, 1990, 1991 and 1993.

Nominated for Auburn University Distinguished Graduate Faculty Lectureship, 1990

Nominated for Auburn University Alumni Professorship, 1989, 1993.

Nominated for Dean's Award for Teaching Excellence, 1984.

PRINCIPAL CONTRIBUTIONS IN AREA OF SPECIALIZATION

Teaching

Undergraduate Level

AEC 200 - Agricultural Economics I, Macroeconomic Theory

AEC 202 - Agricultural Economics II, Microeconomic Theory

AEC 304 - Agricultural Finance

AEC 307 - Agricultural Law

AEC 399 - Internship

AEC 490 - Undergraduate Seminar

Graduate Level

AEC 610 - Quantitative Techniques in Ag. Econ. Research

AEC 680 - Special Problems in Resource Use and Planning

AEC 690 - Graduate Seminar WILLIAM E. HARDY, JR. Page 3

Graduate Research and Theses Directed

Served as Committee Chairman for one Doctoral Degree student and as a member of the Advisory Committee for ten other Doctoral Degree students.

Served as Committee Chairman for twenty-three Masters Degree students and as a member of the Advisory Committee for fifty-six other Masters Degree students.

Graduate Research Topics

Evaluation of Effectiveness and Success of Chapter 12 Bankruptcy Rules.

Economic Evaluation of Options for Processing and Transporting Poultry Litter.

Determination of the Elasticity of Demand for University Vanity License Plates.

Evaluation of the Alabama Farm Crisis and Transition Program.

Evaluation of Alternative Financing Strategies for Poultry Expansion.

Determination of Features that Should be Included in Agricultural Financial Analysis Software.

Evaluation of the Most Important Factors that Influence Loan Officer Performance.

Variations in Costs and Returns Associated with Size and Type of Ventilation in Broiler Production.

Evaluation of the Market for Lite Beef.

Development of a Computer-Assisted Decision Tool for Poultry Hatchery Management.

Analysis of Computer-Assisted Farm Financial Management Tools.

Evaluation of the Potential for Vegetable Production in North Alabama.

Comparison of the Real Interest Rate Paid by Farmers with that Paid by Producers in Other Industries.

Analysis of the Desires of Federal Land Bank Borrowers for Purchasing Additional Financial Services from the Land Bank.

Analysis of Factors Influencing Loan Officer Performance.

Development of More Efficient Methods for Vehicle Routing and Scheduling.

Analysis of Agricultural Financial Ratios.

Statistical Evaluation of Loan Success Characteristics.

Examination of the Profitability of Agricultural Lending for Commercial Banks.

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Discriminate Analysis Approach to Evaluating Credit Worthiness.

Evaluation of Alternative Cotton Marketing Systems.

Determination of an Efficient Vehicle Routing and Scheduling System for an Alabama Milk Processor.

Determination of the Least Cost Solid Waste Disposal System for Northwest Alabama--An Approach to Regional Planning.

Other Research

A Summary Compilation of Legislative and Regulatory Activity in Alabama Relative to the Gulf of Mexico, 1997-1998.

Economic Implications of Federal and State Environmental Laws and Regulations on Alabama Agriculture.

Economic evaluation of transportation of poultry litter. Obtained \$30,000 grant from Southeastern Poultry an Egg Association and \$10,000 grant from Tennessee Valley Authority for research.

Economic Analysis of selected aspects of broiler production. Obtained grant from Alabama Poultry and Egg Association.

Analysis of land markets in the Fifth Farm Credit District.

Obtained grant from Federal Land Bank of Jackson for study of market potential of additional financial services.

Obtained grant from Alabama Department of Agriculture and Industries to study financial condition of Alabama farmers.

Participant in Southern Regional Project on "Transportation of Southern Perishables." Chairman of Committee, 1985-1987.

Development of computer-assisted procedures for delivery route design.

Joint leader for project funded by Sea Grant to evaluate the economic potential for the coastal areas of Alabama. Wrote proposal and obtained grant for funding.

Joint project leader in research designed to determine the influence of various credit policies on the growth capability of a diversified Alabama farm.

Joint participant in project to evaluate economic potential for alternative beef forage feeding systems in Alabama.

Joint participant in project to evaluate cotton marketing alternatives in Alabama.

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Joint participant in project designed to evaluate changes in the quality of life for rural southerners.

Assisted in implementation of Oklahoma State Budget Generator and Cash Flow System at Auburn.

While on active duty with Air Force, directed development of a computerized model to aid in the planning for and scheduling the utilization of new aircraft. The model was designed to determine the quickest way to train pilots and equip a given number of combat-ready squadrons for a specified aircraft production rate.

Other Professional Activities

National and Regional

Served as paper reviewer for the following professional journals:

American Journal of Agricultural Economics Southern Journal of Agricultural Economics Journal of Legal Economics Agricultural Finance Review Agribusiness-An International Journal Decision Sciences

Track Chairman for section of 2001 Southeast American Institute for Decision Sciences Meeting, Charlotte, North Carolina, February 21-23, 2001.

Member of Select Committee to evaluate current activities and recommend strategies for the future for programs offered by Federal Agricultural Mortgage Corporation, 1990-1998.

Invited to serve as consultant to the College of Agriculture, Natural Resources and Environmental Sciences at Naresuan University, Phitsanulok, Thailand, Summer, 1995.

Chairman of Officer Nominating Committee for Southeast Decision Sciences Institute, 1991-1992.

Judge for student papers presented at 1991 Annual Meeting of Southeast Chapter of The Institute of Management Sciences.

Member of Regional Activities Committee, Decision Sciences Institute, 1989-92.

Chairman, Distinguished Service Award Committee, Southeast Decision Sciences Institute, 1989-90.

Program Chairman for 1989 Meeting of Southeast Decision Sciences Institute.

Committee member for selecting outstanding student paper at 1987 and 1988 Annual Meetings of the Institute of Management Sciences-Southeast Chapter.

Track Chairman for section of 1984 Southeast American Institute for Decision Sciences Meeting, Savannah, Georgia, February 22-24, 1984.

Track Chairman for section of 1983 Southeast American Institute for Decision Sciences Meeting, Williamsburg, Virginia, February 7-9, 1983.

Member of American Agricultural Economics Association Awards Committee to select outstanding Master's Thesis, 1979-82.

Page 6

Member of committee to select outstanding undergraduate paper at annual meetings of American Agricultural Economics Association, 1978 and 1980.

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Member of American Institute for Decision Sciences Membership Committee, 1979.

Member of Distinguished Service Award Committee for Southeast American Institute for Decision Sciences, 1980-81 and 1985-86.

Member of Nominating Committee for Southeast American Institute for Decision Sciences, 1979-80.

Track Chairman for section of 1978 Southeast American Institute for Decision Sciences meeting, Jacksonville, Florida, February 15-17, 1978.

Research Associate on Southern Rural Development Center Research Committee for studying problems and systems of solid waste disposal in rural areas.

Member of Southern Regional Work Group for establishing research needs in the area of transportation.

State and Local

Member of Auburn University World Food Programme Committee, 2004-present.

Coordinator for Auburn University College of Agriculture exhibit at SunBelt Agricultural Exposition, 2001-present.

Member of Auburn University Academic Affairs Committee, 2000-present.

Member of Auburn University College of Agriculture Facilities Council, 2001-2003.

Member of Auburn University Deferred Maintenance Committee, 2001-2003.

Member of Auburn University Academic Advisor Peer Review Committee, 2001-2003.

Member of Auburn University Assessment Committee, 2000-2002.

Member of Auburn University SACS Accreditation Committee, 2000-2003.

Chairman of Auburn University College of Agriculture SACS Accreditation Committee, 2000-2003.

Coordinator for Auburn University portion of Alabama Spotlight Exhibit and 2000 SunBelt Agricultural Exposition.

Member of Agriculture Committee, Alabama Bankers Association, 1989-2002.

Chairman of College of Agriculture Scholarship Committee, 1986-92, 2000-present; Member, 1982-86, 1998-00.

Faculty advisor to Agricultural Ambassadors, 1998-00.

Chairman of Search Committee to fill faculty position in agribusiness, 1997-1998.

Member Auburn University NCAA Program Certification Steering Committee, 1995-97.

Acting Chairman of Auburn University Teaching Effectiveness Committee, Spring-Summer, 1993.

Member of Auburn University Academic Affairs Committee, 1993. WILLIAM E. HARDY, JR. Page 7

Faculty advisor to Mortar Board (Student Honorary Society), 1992-94.

Chairman, College of Agriculture Internship Committee, 1989-92.

Member College of Agriculture Dean's Award Committee, 1988-92; 1984-86.

Chairman of Department Planning Committee and Coordinator of Science and Technology in Agriculture Summer Honors Program, 1985-92.

Chairman, E. T. York Distinguished Lectures Series Committee, 1986-90; Member, 1984-86.

Member of Department Curriculum Committee, 1990

Member Auburn University Graduate Council, Fall, 1989; 1981-84.

Served on subcommittee of Graduate Council to evaluate proposed Masters of Forestry Degree, Fall, 1989.

Member College of Agriculture Teaching Improvement Committee, 1988-89; 1982-86.

Member of Department Committee to Evaluate Agribusiness Curriculum, 1989.

Department Coordinator for Mainframe Computer Utilization, 1985-89.

Coordinator of Graduate Programs in Department of Agricultural Economics and Rural Sociology, 1982-September, 1988.

Designated by Dean of Graduate School as Graduate Program Officer for Department, 1987-September, 1988.

Member of Review Team to complete Alabama Council of Higher Education review of Department of Physics, Auburn University, March, 1988.

Secretary of Auburn University Senate and General Faculty, 1987-88.

Member of Executive Committee of Auburn University Senate, 1987-88.

Member of Rules Committee of Auburn University Senate, 1987-88; member of Senate, 1976-78.

Member of Review Team to complete Alabama Council of Higher Education review of Department of Economics, Auburn University, March, 1987.

Chairman of Coordinating Committee for Auburn University Doctoral Program in Economics, 1984-86; Member, 1982-84; 1987-September, 1988.

Member of Ad Hoc Committee to study Auburn University policies on extra compensation, 1985.

Chairman of Department Microcomputer Committee, 1985.

Chairman of Department committee to formulate plans for increased extramural funding, 1985.

Member of Committee to evaluate potential for supercomputer in Alabama, 1985.

Member of College of Agriculture committee to study recruitment and retention of students, 1984.

Page 8

Served on subcommittee of Auburn University Graduate Council to evaluate proposed graduate programs in several areas (Doctor of Education, Master of Public Administration, and Master of Accountancy). Also served on subcommittee to evaluate criteria for Graduate Faculty membership. 1981-84.

Chairman of Department CSRS Review Committee, 1984.

Chairman of Auburn University Traffic and Parking Committee, 1983-84; member, 1981-84.

Member of Alabama Agricultural Experiment Station Faculty Evaluation Committee, 1982-84.

Member of Committee to Study Housing Needs of Integrated Research, Teaching and Extension, 1981.

Member Agricultural Experiment Station *Highlights of Agricultural Research* review committee, 1981-83

Chairman of School of Agriculture Visiting Scientist Committee, 1980-81.

Member of Planning Committee for Agricultural Alumni Day, 1980-81.

Member of Committee for Planning Annual School of Agriculture and Agricultural Experiment Station Staff Conference, 1977 and 1980.

Faculty Advisor, School of Agriculture Ag. Council, 1980-82; Agricultural Economics Club, 1973-79.

Member of School of Agriculture Self-Study Committee, 1981-82.

Chairman of Membership Committee, Gamma Sigma Delta, 1977-81.

Chairman of Agricultural Economics Steering Committee for Auburn University Doctoral Program in Economics. Joint Author Doctoral Program Proposal, 1979-81.

Chairman of Agricultural Economics Graduate Comprehensive Exam Committee, 1979-80; Member, 1977-79.

PUBLICATIONS

Refereed Publications (* denotes senior author)

- *1998 "Maximizing the Effectiveness of the Expert Witness." *Alabama Trial Lawyers Journal*, Vol. 18, No. 3, Summer, 1998.
- *1993 "Use of National Opinion Research Center Data When Estimating Lost Earnings Capacity of an Injured Child." *Journal of Legal Economics*, Vol. 3, No. 3., December 1993, 73-85.
- *1992 "Setting the Interest Rate in Chapter 11 and Chapter 12 Bankruptcy Cases," (with Ben F. Easterlin, IV). Norton's *Annual Review of Bankruptcy Law*, Clark, Boardman, Callaghan, 225-249.
- 1991 "A Farm Management Analysis of Supplemental Center-Pivot Irrigation in Humid Regions," (with L. Upton Hatch, Eugene Rochester, and Rebecca Pickren). *Journal of Production Agriculture*, Vol. 4, No. 3, July-Sept 1991, 442-447.
- *1990 "Determination of Features That Should be Included in Microcomputer Farm Financial Analysis

and Planning Software," (with Howard W. Haynie, J. Lavaughn Johnson, and N. Rob Martin). *Journal of Farm Managers and Rural Appraisers*, Vol 54, No. 2, October, 76-83.

- 1989 "A Markov Chain Analysis of Pork Farm Size Distribution in the South: Reply," (with W. Terry Disney and Patricia A. Duffy). *Southern Journal of Agricultural Economics*, Vol. 21, No. 2, December, 219.
 - "Reduced Risk Crop Rotations for Fresh Vegetable Production in the Sand Mountain and Tennessee Valley Regions of Alabama," (with Michael E. Zwingli and John L. Adrian, Jr.). Southern Journal of Agricultural Economics, Vol. 21, No. 2, December, 155-166.
- 1988 "A Markov Chain Analysis of Pork Farm Size Distribution in the South," (with W. Terry Disney and Patricia A. Duffy). Southern Journal of Agricultural Economics, Vol. 20, No. 2, December, 57-64.
- *1987 "An Analysis of Factors That Affect the Quality of Federal Land Bank Loans," (with Stanley R. Spurlock, Donnie R. Parrish and Lee A. Benoist). *Southern Journal of Agricultural Economics*, Vol. 19, No. 2, December, 175-182.
- 1986 "Foreign Interests in Alabama's Agricultural Land: an Update," (with John Adrian and Anne Mims). *The Alabama Business and Economic Journal*, Vol. 10, No. 1, 33-44.
- *1985 "A Linear Programming Alternative to Discriminant Analysis in Credit Scoring," (with John L. Adrian, Jr.). *Agribusiness-An International Journal*, Vol. 1, No. 4, 285-292.
 - "Position Selection of Center Pivot Irrigation Systems Using Linear Programming," (with Clark Anderson and Eugene W. Rochester). *Transactions of American Society of Agricultural Engineers*, Vol. 28, No. 5, 1551-1556.
 - "Optimal Irrigation Pivot Location on Irregular Shaped Fields," (with L. Upton Hatch, Eugene W. Rochester and Gregory C. Johnson). *Southern Journal of Agricultural Economics*, Vol. 17, No. 2, 163-170.
- *1983 "Planning Solar Heating for Poultry A Linear Programming Approach," (with Joy M. Clark and Morris White). *Southern Journal of Agricultural Economics*, Vol. 15, No. 2, 7-11.
- * "A Cost Effective Approach for Solving Large Variable Demand Vehicle Routing and Scheduling Problems," *Journal of Food Distribution Research*, Vol. XIV, No. 3, September, 32-38.
- 1982 "Are Marginal Values the Real Basis for Farm Enlargement?" (with Howard A. Clonts). *Journal of Midsouth Academy of Economists*, Vol. 6, No. 1, May, 53-58.
- *1980 "Vehicle Routing Efficiency A Comparison of Districting Analysis and the Clarke-Wright Method," *American Journal of Agricultural Economics*, Vol. 62, No. 3, August, 534-536.
- * "Objective Evaluation for Agricultural Lending," (with J. B. Weed). Southern Journal of Agricultural Economics, Vol. 12, No. 1, July, 159-163.
- * "The Profitability of Agricultural Customers for Commercial Banks," (with M. W. Moore). Southern Journal of Agricultural Economics, Vol. 12, No. 1, July, 155-158.
 - "Objective Credit Scoring--An Analysis of Agricultural Borrower Characteristics," (with J. B. Weed). *Journal of Alabama Academy of Science*, Vol. 51, No. 4, October, 260-272.
- *1979 "A Look at Alternative Product Distribution Systems," (with Vayden L. Murphy, Jr.). *Journal of Alabama Academy of Science*, Vol. 50, No. 4, October, 211-219.

Page 10

- *1977 "An Economic Analysis of a Regionalized Rural Solid Waste Management System: Reply," (with Curtis L. Grissom). *American Journal of Agricultural Economics*, Vol. 59, No. 4, November, 771.
- *1976 "An Economic Analysis of a Regionalized Solid Waste Management System," (with Curtis L. Grissom). *American Journal of Agricultural Economics*, Vol. 58, No. 2, May, 179-185.
- *1975 "Health Education Spans Outreach Clinics: A Concept to Consider," (with J. Paxton Marshall and J. Edwin Faris). *Health Education Monographs*, Vol. 3, No. 1, Spring.
- *1973 "Determining Best Locations for Rural Medical Facilities--A Procedure and It's Data Needs," (with J. Paxton Marshall and J. Edwin Faris). *Southern Journal of Agricultural Economics*, Vol. 5, No. 2, December, 165-174.

Refereed Proceedings (* denotes senior author)

- *1990 "A Simulation Analysis of Poultry Investment Decisions," (with Paula P. Weissend). Refereed paper in *Proceedings of 26th Annual Meeting of The Institute for Management Sciences-Southeast Chapter*. Edited by K.E. Fitzpatrick and J.R. Baker, Appalachian State Univ., Boone, N.C.
 - "Introduction to the General Algebraic Modeling system (GAMS)," (with Neil R. Martin, Jr. and Surajudeen O. Olowolayemo). Refereed paper in *Proceedings of Twenty-Second Annual Meeting of Southeast Region of the Decision Sciences Institute*. Edited by Joanna R. Baker and Kathy E. Fitzpatrick. Atlanta: Decision Sciences Institute.
- *1989 "A Delphi Analysis of Loan Officer Selection Criteria," (with Kenneth H. Foshee). Refereed paper in *Proceedings 1989 Western DSI*. Edited by V. V. Bellur and John C. Rogers. Atlanta: Western Decision Sciences Institute.
- "Incorporating Price Effects Into A Markov Chain Analysis of Pork and Feeder Beef Farm Size Distribution," (with W. Terry Disney and Patricia A. Duffy). Refereed paper in Northeast DSI Proceedings. Edited by Peter J. Bullington. Atlanta: NE Decision Sciences Institute, 123-125.
- *1987 "A Mixed Integer Target MOTAD Analysis of Vegetable Production," (with Michael E. Zwingli and John L. Adrian). Refereed paper in *Proceedings 1987 Decision Sciences Institute*. Edited by Robert A. Parsons and John C. Saber. Atlanta: Decision Sciences Institute, 981-983.
 - "A Discriminant Evaluation of Agricultural Real Estate Credit," (with Stanley R. Spurlock, Donnie R. Parrish and Lee A. Benoist). Refereed paper in *Proceedings 1987 Southeast Decision Sciences Institute*. Edited by Betty Whitten and Richard J. Fox. Atlanta: Southeast Decision Sciences Institute, 69-71.
- "A Mixed Integer Programming Model for Determining the Optimal Investment in Farm Machinery," (with Ebenezer F. Kolajo and Neil R. Martin, Jr.). Refereed paper in *Proceedings* 1986 Southeast American Institute for Decision Sciences. Edited by Michael D. Oliff and Terry Rakes. Atlanta: Southeast American Institute for Decision Sciences, 65-67.
 - "An Empirical Analysis of the Market for Financial Services," (with John L. Adrian, Jr., J. Arthur Glasgow and Lee A. Benoist). Refereed paper in *Proceedings 1986 Southeast American Institute for Decision Sciences*. Edited by Michael D. Oliff and Terry Rakes. Atlanta: Southeast American Institute for Decision Sciences, 338-339.

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- * "An Evaluation of the Risk-Return Relationship in Irrigation with Mixed Integer Motad Programming," (with L. Upton Hatch, Rebecca L. Pickren and Eugene W. Rochester). Refereed paper in *Proceedings 1986 Southeast American Institute for Decision Sciences*. Edited by Michael D. Oliff and Terry Rakes. Atlanta: Southeast American Institute for Sciences, 71-73.
- *1985 "A Mixed Integer Programming Model for Determining the Optimal Location, Size and Number of Center-Pivot Irrigation Systems," (with L. Upton Hatch, Eugene W. Rochester and Gregory C. Johnson). Refereed paper in *Proceedings 1985 Southeast American Institute for Decision Sciences*. Edited by James U. Smith, Jr. and Carl W. Gooding. Atlanta: Southeast American Institute for Decision Sciences, 1-3.
- *1984 "A Linear Programming Approach to Credit Scoring," (with John L. Adrian, Jr.). Refereed paper in *Proceedings 1984 Southeast American Institute for Decision Sciences*. Edited by Richard G. Flood. Atlanta: Southeast American Institute for Decision Sciences, February, 227-229.
- *1979 "Districting Analysis as a Tool to Aid Management in Developing Efficient Routing Networks."

 Refereed paper in *Decision Sciences in the Public and Private Sectors: Theory and Application*.

 Edited by K. S. Brown and R. B. Robbins. Atlanta: Southwest American Institute for Decision Sciences, March, 432-437.
- * "Acquisition of Data for Management Decisions in Vehicle Routing and Facility Location Analysis." Refereed paper in *Proceedings 1979 Southeast American Institute for Decision Sciences*. Edited by A. H. Kvanli and J. G. VanMatre. Atlanta: Southeast American Institute for Decision Sciences, February, 293-295.
- *1977 "Educational Investment Analysis--A Teaching Tool for Principles of Economic Courses," (with John L. Adrian, Jr.). Refereed paper in *Proceedings 1977 Southeastern American Institute for Decision Sciences*. Edited by James R. Harris and Arthur G. Bedeian. Atlanta: Southeast American Institute for Decision Sciences, February, 186-188.
- *1975 "A Quantitative Approach to Solving Community Service Problems," (with Curtis L. Grissom). Refereed paper in *Contemporary Perspectives in the Decision Sciences*. Edited by Ted F. Anthony & Archie B. Carroll. Atlanta: Southeast American Institute for Decision Sciences, February, 85-87.
- *1974 "Determining the Best Locations for Community Service Facilities: A Model and Its Application," (with J. Paxton Marshal and J. Edwin Faris). Refereed paper in *Scientific and Behavioral Foundations for Decision Sciences*. Edited by Laurence Moore and Sang Lee. Atlanta: Southeast American Institute for Decision Sciences, February, 238-241.

Published Abstracts (* denotes senior author)

- *1989 "An Examination of Factors Important in the Selection and Performance Appraisal of Agricultural Loan Officers," (with Kenneth H. Foshee). *Southern Journal of Agricultural Economics*, Vol. 21, No. 1, July, 184.
- 1988 "The Rural Land Market in the Fifth Farm Credit District," (with John L. Adrian, Jr. and Lee A. Benoist). Southern Journal of Agricultural Economics, Vol. 20, No. 1, July, 207.
- "Cotton Acreage and Farm Program Participation Under Selected Farm Program Provisions: An Integer Programming Approach," (with Anne Mims and Patricia Duffy). Southern Journal of Agricultural Economics, Vol. 19, No. 1, July, 140.

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- "Reduced Risk Crop Rotations for Fresh Vegetable Production in the Sand Mountain and Tennessee Valley Regions of Alabama," (with Michael E. Zwingli and John L. Adrian, Jr.). Southern Journal of Agricultural Economics, Vol. 19, No. 1, July, 135.
- * "An Analysis of Factors That Affect the Quality of Federal Land Bank Loans," (with Stanley R. Spurlock, Donnie R. Parrish, and Lee A. Benoist). *Southern Journal of Agricultural Economics*, Vol. 19, No. 1, July, 130.
- 1986 "The Market Potential for Fresh Vegetables in the Tennessee Valley," (with Michael E. Zwingli and John L. Adrian, Jr.). Southern Journal of Agricultural Economics, Vol. 18, No. 1, July, 194.
 - "A Mixed Integer Motad Model for Irrigation Evaluation," (with L. Upton Hatch, Rebecca L. Pickren and Eugene W. Rochester). *Southern Journal of Agricultural Economics*, Vol. 18, No. 1, July, 189.
 - "Financial Stress and Debt Use," (with Kenneth Moss and Gregory D. Hanson). Southern Journal of Agricultural Economics, Vol. 18, No. 1, July, 178.
- *1985 "Optimal Irrigation Pivot Location on Irregular Shaped Fields," (with L. Upton Hatch, Eugene W. Rochester, and Gregory C. Johnson). *Southern Journal of Agricultural Economics*, Vol. 17, No. 1, July, 203.
- * "Financial Condition of Alabama Agriculture," (with J. Stanton Smith and Laura R. Cox). Journal of Alabama Academy of Science, Vol. 56, No. 3.
- *1984 "Vehicle Routing and Scheduling with Microcomputer." *Journal of Food Distribution Research Society*, Vol. 15, No. 1.
- *1983 "A Cost Effective Approach for Solving Large Variable Demand Vehicle Routing and Scheduling Problems," *Southern Journal of Agricultural Economics*, Vol. 15, No. 1, July, 167.
- * "Planning Solar Heating for Poultry A Linear Programming Approach," (with J. M. Clark and Morris White). Southern Journal of Agricultural Economics, Vol. 15, No. 1, July, 172.

Non-Refereed Publications (* denotes senior author)

- *1990 "A Simulation Analysis of Poultry Investment Decisions," (with Paula P. Weissend). *Proceedings of 26th Annual Meeting of The Institute of Management Sciences-Southeastern Chapter*, Myrtle Beach, S.C.
- *1982 "The Use of a Grid Network in Solving Vehicle Routing and Scheduling Problems," *Proceedings* of 18th Annual Meeting of The Institute of Management Sciences Southeastern Chapter, Myrtle Beach, S.C.

Books (* denotes senior author)

- *2002 "Use of National Opinion Center Data When Estimating Lost Earning Capacity of an Injured Child." Reading 7 in *Assessing Damages in Injuries and Deaths of Minor Children*. Thomas R. Ireland and John O. Ward. Tucson, Arizona: Lawyers & Judges Publishing Company, Inc.
- *1996 "Use of National Opinion Center Data When Estimating Lost Earning Capacity of an Injured Child." Reading 32 in *Valuing Children in Litigation: Family and Individual Loss Assessment*.

 Thomas R. Ireland and John O. Ward. Tucson, Arizona: Lawyers & Judges Publishing Company, Inc.

Page 13

- *1989 Proceedings 1989 Southeast Decision Sciences Institute, (with John L. Adrian, Jr.). An edited compilation of papers presented at 1989 Annual Meeting of Southeast Decision Sciences Institute, 427 pages.
- * Quantitative Methods for Economic Analysis, Manuscript used in AEC 610.

"Health Education Spans Outreach Clinics: A Concept to Consider," (with J. Paxton Marshall and J. Edwin Faris). Paper in *Cooperative Rural Health Education*. Edited by Carol D'Onofrio and Virginia Li Wang. Thorofare, New Jersey: Charles B. Slack, Inc.

Magazine Articles (* denotes senior author)

- *1982 "Improved Efficiency in Large Delivery Systems," Dairy Field, Vol. 165, No. 11, November.
- * "Reduced Cost Routes for Large Variable Demand Delivery Systems," *Beverage Industry*, Vol. 74, No. 10, November.
- * Reducing Distribution Costs Through Computerized Routing Analysis," *Meat Processing*, July.
- *1980 "Designing Efficient Route Networks, Part 2," Dairy Field, Vol. 163, No. 5, May.
- * "Designing Efficient Route Networks, Part 1," Dairy Field, Vol. 163, No. 4, April.
- * "Improved Route Efficiency Through Districting," Beverage Industry, Vol. 67, No. 17, April.
- * "Profitability of Agricultural Customers," (with M. W. Moore), Agricultural Banker, March.
- *1979 "Cutting Distribution Costs Through Route Reorganization," *Beverage Industry*, Vol. 67, No. 17, September.
- "Cutting Distribution Costs Through Route Reorganization," Dairy and Ice Cream Field, Vol. 162,
 No. 6, June.

Auburn University, Alabama Agricultural Experiment Station and Alabama Cooperative Extension Service Publications (* denotes senior author)

- *1999 Handbook for Teaching, Monograph being published for Auburn University College of Agriculture.
- *1994 "Farm Financial Situation Improving", *Alabama Agricultural Outlook and Policy Issues*, Department of Agricultural Economics and Rural Sociology, February, 1994, AEC94-1.
- *1993 "So Much to Cover, So Little Time", AU Report, May 31, 1993.
- * "Don't Forget the Blackboard", AU Report, May 4, 1993.
- * "Active Learning in the Classroom-Are You Willing to Take the Risk", AU Report, March 8, 1993.
- * "Principles for Good Practice in Undergraduate Education", AU Report, January 25, 1993.
- 1991 Graduate Programs in Agricultural Economics and Rural Sociology, (with J.E. Dunkelberger and N.R. Martin). Dept. of Agricultural Economics and Rural Sociology, Auburn University, Department Series No. 15., January.
- 1989 Rural Land Markets in Alabama, (with J. L. Adrian). Alabama Agricultural Experiment Station Bulletin 602, November.

- 1987 "Farm Financial Condition Shows Improvement," (with J. H. Yeager and J. L. Johnson).

 Highlights of Agricultural Research. Alabama Agricultural Experiment Station, Vol. 34, No. 4,
 Winter.
 - Wholesale Market Potential for Fresh Vegetables Grown in North Alabama, (with M. E. Zwingli, J. L. Adrian, and W. J. Free). Alabama Agricultural Experiment Station Bulletin No. 586, July.
 - Financial Stress, Debt Use, and Cost Control Among Sample Alabama Farms, (with Gregory D. Hanson and Kenneth H. Moss). Alabama Agricultural Experiment Station Circular No. 290, June.
- 1986 *The Financial Condition of Alabama Farmers*, (with J. Lavaughn Johnson, J. H. Yeager, Hugh Bynum, and John Gamble). Agricultural Economics Series No. 39, Alabama Agricultural Experiment Station, June.
- * "Farmers Pay High Interest Rates, Too," (with S. Olowolayemo), *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 33, No. 3, Fall.
- *1985 "Macroeconomics and Agriculture-Introduction," *Alabama Agribusiness Cooperative Extension Service*, Vol. 24, No. 1, July.
- *1985 "Alabama Farmers in Precarious Financial Position," (with J. Stanton Smith and Laura R. Cox), Highlights of Agricultural Research. Alabama Agricultural Experiment Station, Vol. 32, No. 2, Summer.
- * The Financial Status of Alabama Agriculture, 1984, (with J. Stanton Smith and Laura R. Cox).
 Agricultural Economics Series No. 37, Alabama Agricultural Experiment Station, April.
 - "An Economic-Engineering Model to Select Optimal Location, Size, and Number of Center Pivot Irrigation Systems," (with G. C. Johnson, E. W. Rochester, and L. U. Hatch). *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 32, No. 1, Spring.
- *1983 "An Objective Evaluation of Federal Land Bank Borrowers," (with James E. Patterson).

 **Highlights of Agricultural Research, Alabama Agricultural Experiment Station, Vol. 30, No. 2,

 Summer.
- *1982 "Benchmark Financial Ratios," (with Stephen F. Foshee), *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 29, No. 1, Spring.
- *1981 "Agricultural Loan Profitability for Commercial Banks," (with Michael W. Moore). *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 28, No. 2, Summer.
- * "Objective Alternatives for Improving Delivery Route Efficiency," *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 28, No. 1, Spring.
- *1980 "The Structure of the Agricultural Credit Market," *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 27, No. 4, Winter.
 - Agricultural Lending Profitability for Alabama Commercial Banks, (with M. W. Moore), Alabama Agricultural Experiment Station Bulletin No. 520, August.
 - Objective Credit Scoring of Agricultural Borrowers, (with J. B. Weed), Alabama Agricultural Experiment Station Circular 249, May.

Managerial Ability and Its Effect on Farm Growth, (with J. K. Morrow and S. C. Bell), Alabama Agricultural Experiment Station Bulletin No. 518, May.

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The Economic and Environmental Structure of Alabama's Coastal Region Part I, (with R. G. Nelson), Special Sea Grant sponsored report, Auburn University Department of Agricultural Economics and Rural Sociology, April.

The Economic and Environmental Structure of Alabama's Coastal Region Part II, (with R. G. Nelson and J. B. Flynn), Special Sea Grant sponsored report, Auburn University Department of Agricultural Economics and Rural Sociology, April.

- * "Credit and Finance Situation," Alabama Agribusiness, Alabama Cooperative Extension Service, Vol. 18, No. 4, April.
- *1979 "An Objective Method of Evaluating Credit Worthiness," (with J. B. Weed), *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 26, No. 4, Winter.

"The Economy of Alabama's Coastal Counties," (with Robert G. Nelson), *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 26, No. 2, Summer.

Marketing of Alabama Cotton--Methods and Problems, (with G. W. Hill and M. White), Alabama Agricultural Experiment Station Bulletin No. 513, June.

Efficient Vehicle Routing--A Milk Distribution Example, (with Vayden L. Murphy, Jr.), Alabama Agricultural Experiment Station Bulletin 511, February.

- 1977 The Effect and Use of Alternative Credit Policies on the Financial Growth of an Alabama Farm, (with H. C. Daniel and S. C. Bell), Alabama Agricultural Experiment Station Bulletin No. 492, September.
- * The Cascade Algorithm A Procedure and Program for Obtaining Shortest Paths, Agricultural Economics Series 28, Alabama Agricultural Experiment Station, September.

Bibliography on Solid Waste Management, (authorship shared with members of Research Task Force), Rural Development Bibliography Section 3, Southern Rural Development Center, Mississippi State University.

- *1976 The Cost of Money--A Look at the Interest Rate and Government Regulations, Alabama Agricultural Experiment Station Bulletin No. 482, November.
- * A Computer Program for Determining the Expected Rate of Return on the Investment in a College Education, (with John L. Adrian, Jr.), Agricultural Experiment Station, Alabama Agricultural Economics Series No. 26, August.
- * "Factors Behind Rising Food Costs--Should the Farmer Be Blamed?" *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 23, No. 2, Summer.
- 1975 "The Rural Alabama Female Head and Her Household," (with C. L. Vanlandingham), *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 22, No. 3, Fall.

Planning for Community Services in Rural Areas--A Regional Approach to Solid Waste Management, (with C. L. Grissom), Alabama Agricultural Experiment Station Bulletin No. 464, January.

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- 1974 "Employment and Rural Development," (with C. L. Vanlandingham), *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 21, No. 3, Fall.
- * "Alternative Approaches to Land Use," *Alabama Agribusiness*, Alabama Cooperative Extension Service, Vol. 13, No. 1, July.
- *1973 "Health Resources in Rural Areas," *Highlights of Agricultural Research*, Alabama Agricultural Experiment Station, Vol. 20, No. 2, Summer.
- * "Agricultural Prices--A New Ball Game," *Alabama Agribusiness*, Alabama Cooperative Extension Service, Vol. 11, No. 4, April.
- * A Computer Program for Locating Economic Facilities. Alabama Agricultural Experiment Station, Agricultural Economics Series 24, March.
- *1972 "Health Care in Rural Areas." Virginia Cooperative Extension Service, No. 232, June.
- * "A Conspectus of Determining Best Locations for Health Outreach Clinics: An Economic Analysis Based on Virginia Planning District 10." Virginia Cooperative Extension Service, Agricultural Economics Series M.B. 159, June.
- *1970 "Consumer Shopping Survey: Charlottesville, Virginia," (with Don L. Long and J. Edwin Faris).

 Department of Agricultural Economics, Virginia Tech, December.

PRESENTATIONS

National and Regional (* denotes senior author)

- *2002 "The Agricultural Economy." Invited paper presented at Annual Meeting of Southern Equipment Dealers Association, Savannah, Georgia, February 11.
- *2001 "Trends in Southern Agriculture." Paper presented at Annual Meeting of Southern Equipment Dealers Association, Point Canaveral, Florida, February 22.
- 1997 "Environmental Regulation of the Alabama Livestock Sector, A National Perspective." (with James Novak, James Hurst, S. Kaitibie and L. Sanders). Paper presented at Deep South Environmental Conference, Auburn, Alabama, October 22.
- *1994 "Preparing the Preprofessoriate to Teach." Invited paper presented at Annual Meeting of Academic Programs Section/Academic Committee on Organization and Policy, National Association of State Universities and Land Grant Colleges, Auburn, July 19. (Paper was presented by Dr. Ford Laumer because of a death in my family).
- *1993 "Estimation of Lost Earnings for an Injured Child With No Education." Paper presented at 1993 Annual Meeting of American Academy of Economic and Financial Experts, Las Vegas, April 1.
- *1992 "A Method for Estimating Long Term Economic Loss In Agricultural Operations." Presented at 1992 Annual Meeting of American Academy of Economic and Financial Experts, Las Vegas, April 2.

- *1991 "Factors to Consider in Agricultural Bankruptcy Cases." Presented at 1991 Annual Meeting of Southeast Chapter of The Institute of Management Sciences, Myrtle Beach, South Carolina, October 3.
- * "Setting the Interest Rate in Agricultural Bankruptcy Cases." Presented at 1991 Annual Meeting of American Academy of Economic and Financial Experts, Las Vegas, April 4.
- * Presidential Address at 1991 Annual Meeting of Southeast Decision Sciences Institute, Crystal City, Virginia, March 1.
- *1990 "A Simulation Analysis of Poultry Investment Decisions," (with Paula P. Weissend). Presented at 1990 Annual Meeting of The Institute of Management Sciences-Southeaster Region, Myrtle Beach, S.C., October 5.
- * "An Economist's View of the Value of a Lost Contract (What is a Load of Wood Worth?)." Presented at 1990 Annual Meeting of American Academy of Economic and Financial Experts, Las Vegas, April 26.
 - "Introduction to the General Algebraic Modeling System (GAMS)," (with Neil R. Martin, Jr. and Surajudeen O. Olowolayemo). Workshop presented at 1992 Annual Meeting of Southeast Region of the Decision Sciences Institute, Savannah, February 21.
- * "Evaluation of Agricultural Financial Analysis Expert System (AFAES) With Alabama Data." Paper presented at meeting of AFAES National Task Force, Texas A & M, College Station, January 18.
- 1989 "Consumer Preference Modeling in Evaluating Food Consumption and Demand in Developing Countries," (with C. M. Jolly, O. Dilop, and J. C. Williams). Presented at 1989 Annual Meeting of American Agricultural Economics Association, Baton Rouge, August 1.
- * "A Delphi Analysis of Loan Officer Selection Criteria," (with Kenneth H. Foshee). Presented at 1989 Annual Meeting of Western Decision Sciences Institute, Monterey, California, March 24.
- * "An Examination of Factors Important in the Selection and Performance Appraisal of Agricultural Loan Officers," (with Kenneth H. Foshee). Presented at 1989 Annual Meeting of Southern Agricultural Economics Association, Nashville, Tennessee, February 7.
- 1988 "Incorporating Price Effects into a Markov Chain Analysis of Pork and Feeder Beef Farm Size Distribution," (with W. Terry Disney and Patricia A. Duffy). Presented at 1988 Annual Meeting of Northeast Decision Sciences Institute, Newport, Rhode Island, March 24.
 - "The Rural Land Market in the Fifth Farm Credit District," (with John L. Adrian, Jr. and Lee A. Benoist). Presented at the 1988 Annual Meeting of the Southern Agricultural Economics Association, New Orleans, February 4.
- *1987 "A Mixed Integer Target Motad Analysis of Vegetable Production," (with Michael E. Zwingli and John L. Adrian, Jr.). Presented at the 1987 Annual Meeting of Decision Sciences Institute, Boston, November 23.

- "Credit Factors Affecting Agricultural Real Estate Loans," (with Stanley R. Spurlock, Lee A. Benoist, and Donnie R. Parrish). Presented at 1987 Annual Meeting of the Delta States Farm Management Group, Winrock International, June 3-5.
- * "A Discriminant Evaluation of Agricultural Real Estate Credit," (with Stanley R. Spurlock, Donnie R. Parrish, and Lee A. Benoist). Presented at 1987 Annual Meeting of Southeast Decision Sciences Institute, Richmond, Virginia, February 15. Paper was judged as the best theoretical/empirical paper presented at meeting.
 - "Cotton Acreage and Farm Program Participation Under Selected Farm Program Provisions: An Integer Programming Approach," (with Anne Mims and Patricia Duffy). Presented at 1987 Annual Meeting of Southern Agricultural Economics Association, Nashville, February 4.
 - "Reduced Risk Crop Rotations for Fresh Vegetable Production in the Sand Mountain and Tennessee Valley Regions of Alabama," (with Michael E. Zwingli and John L. Adrian, Jr.). Presented at 1987 Annual Meeting of Southern Agricultural Economics Association, Nashville, February 3.
- * "An Analysis of Factors that Affect the Quality of Federal Land Bank Loans," (with Stanley R. Spurlock, Donnie R. Parrish, and Lee A. Benoist). Presented at 1987 Annual Meeting of Southern Agricultural Economics Association, Nashville, February 2.
- 1986 "The Market Potential for Fresh Vegetables in the Tennessee Valley," (with Michael E. Zwingli and John L. Adrian, Jr.). Presented at 1986 Annual Meeting of Southern Agricultural Economics Association, Orlando, February.
 - "A Mixed Integer Motad Model for Irrigation Evaluation," (with L. Upton Hatch, Rebecca L. Pickren and Eugene W. Rochester). Presented at 1986 Annual Meeting and Southern Agricultural Economics Association, Orlando, February.
- * Financial Stress and Debt Use," (with Kenneth Moss and Gregory D. Hanson). Presented at 1986 Annual Meeting of Southern Agricultural Economics Association, Orlando, February.
 - "A Mixed Integer Programming Model for Determining the Optimal Investment in Farm Machinery," (with Ebenezer F. Kolajo and Neil R. Martin, Jr.). Presented at 1986 Annual Meeting of Southeast American Institute for Decision Sciences, Orlando, February.
- * "An Empirical Analysis of the Market for Financial Services," (with John L. Adrian, Jr., J. Arthur Glasgow, and Lee A. Benoist). Presented at 1986 Annual Meeting of Southeast American Institute for Decision Sciences, Orlando, February.
- * "An Evaluation of the Risk-Return Relationship in Irrigation With Mixed Integer Motad Programming," (with L. Upton Hatch, Rebecca L. Pickren, and Eugene W. Rochester). Presented at 1986 Annual Meeting of Southeast American Institute for Decision Sciences, New Orleans, February.
- *1985 "How Big Should the Fish Be? A Mixed Integer Programming Analysis," (with Fatma El Nemaka and Thomas Lovell). Presented at 1985 Annual Meeting of Southeast American Institute for Decision Sciences, New Orleans, February.

- * "A Mixed Integer Programming Model for Determining the Optimal Location, Size and Number of Center-Pivot Irrigation Systems," (with L. Upton Hatch, Eugene W. Rochester, and Gregory C. Johnson). Presented at 1985 Annual Meeting of Southeast American Institute for Decision Sciences, New Orleans, February.
- * "Using Linear Programming to Determine the Optimal Irrigation for Peanuts," (with L. Upton Hatch, Eugene W. Rochester, and Gregory C. Johnson). Presented at 1985 Annual Meeting of Southern Agricultural Economics Association, Biloxi, February.
- *1984 "A Linear Programming Alternative to Discriminant Analysis," (with John L. Adrian, Jr.).

 Presented at 1984 Annual Meeting of Southern Agricultural Economics Association, Nashville,
 February 6.
- * "A Linear Programming Approach to Credit Scoring," (with John L. Adrian). Presented at the 1984 Annual Meeting of Southeast American Institute for Decision Sciences, Savannah, February 23.
 - "Positioning Center Pivot Irrigation Systems Using Linear Programming," (with W. C. Anderson and E. W. Rochester). Presented at Annual Meeting of American Society of Agricultural Engineers, Knoxville, June 25.
- *1983 "Vehicle Routing and Scheduling with Microcomputers," Presented at Annual Meeting of Food Distribution Research Society, Memphis, October 5.
- * "Vehicle Routing and Scheduling for Large Regional Models," Presented at Annual Meeting of Southern Regional Science Association, Charleston, April 14.
- * "Planning Solar Heating for Poultry A Linear Programming Approach," (with Joy M. Clark and Morris White). Presented at 1983 Annual Meeting of Southern Agricultural Economics Association, Atlanta, February 5.
- * "A Cost Effective Approach for Solving Large Variable Demand Vehicle Routing and Scheduling Problems." Presented at 1983 Annual Meeting of Southern Agricultural Economics Association, Atlanta, February 5.
- *1982 "The Use of a Grid Network in Solving Vehicle Routing and Scheduling Problems." Presented at Annual Meeting of the Institute of Management Science Southeastern Chapter, Myrtle Beach, October 7.
- * "Reduce Distribution Costs Through Improved Efficiency." Invited paper presented to Annual Meeting of Georgia Independent Meat Packers and Processors, Jekyll Island, July 26.
- 1981 "Are Marginal Values the Real Basis for Farm Enlargement?" (with Howard A. Clonts). Presented at Annual Meeting of Midsouth Academy of Economists, Memphis, February 5.
- *1980 "Vehicle Routing and Scheduling--The State of the Art." Symposium presented at Annual Meeting of American Institute for Decision Sciences, Las Vegas, November.
- * "A Management Oriented Computerized Approach for Vehicle Routing and Scheduling." Paper presented to Annual Distribution Seminar of Georgia Dairy Products Association, Atlanta,

October.

WILLIAM E. HARDY, JR.

- * "Route Improvement Through Districting: A Management Oriented Approach." Invited paper presented to conference on Human Aided Optimization at The Wharton School, University of Pennsylvania, Philadelphia, August.
- "Customer Profitability Analysis for Agriculturally Oriented Commercial Banks in Alabama," (with M. W. Moore). Invited paper presented to Federal Reserve System Committee on Agricultural and Rural Development, Federal Reserve Bank of Atlanta, June 3.
- *1979 "Let's Take an Overall Look at Designing Economically Efficient Distribution Systems." Invited paper presented to Annual Marketing and Distribution Seminar of Georgia Dairy Products Association, October, Atlanta.
- * "The Role of Credit Institutions in the Future of Agriculture in the Southeast." Invited paper presented to Annual Personnel Conference of Federal Land Bank of New Orleans, April 20, Gulf Shores, Alabama.
- * "Districting Analysis as a Tool to Aid Management in Developing Efficient Routes." Paper presented to 1979 Annual Meeting of Southwest American Institute for Decision Sciences, March, Houston.
- * "Acquisition of Data for Management Decisions in Vehicle Routing and Facility Location Analyses." Paper presented to 1979 Annual Meeting of Southeast American Institute for Decision Sciences, February, Nashville.
- *1977 "Educational Investment Analysis--A Teaching Tool for Principles of Economics Courses," (with John L. Adrian, Jr.). Paper presented to 1977 Annual Meeting of Southeast American Institute for Decision Sciences, February, Birmingham.
- *1976 "A Look at the Efficiency of Vehicle Utilization in Wholesale Milk Delivery," (with Vayden L. Murphy). Paper presented at Joint National Meeting of Operations Research Society of America/The Institute for Management Sciences, November 5, Miami.
 - "An Investment Analysis of Higher Education," (with John L. Adrian, Jr.). Paper presented at Joint National Meeting of Operations Research Society of America/The Institute for Management Sciences, November 4, Miami.
- *1975 "An Operations Research Approach to Regional Planning," (with Curtis L. Grissom). Paper presented at Joint National Meeting of Operations Research Society of America/The Institute of Management Sciences, November, Las Vegas.
- * "The Importance of Cooperative Efforts in Providing Community Services." Invited paper presented at Regional and International Economic Development Planning Conference sponsored by Bureau of Economic Research and Development, July, Petersburg, Virginia.
- * "A Quantitative Approach to Solving Community Service Problems," (with Curtis L. Grissom). Paper presented at 1975 Southeastern American Institute for Decision Sciences Meeting, February, Columbia, South Carolina.

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- * "An Economic Analysis of a Regionalized Rural Community Service." Paper presented at Annual Meeting of Southern Agricultural Economics Association, February, New Orleans.
 - "Occupational and Employment Change in the Rural South: 1960-1972," (with C. L. Vanlandingham). Panel discussion presented at Annual Meeting of Southern Rural Sociological Society, February, New Orleans.
- *1974 "Determining Best Locations for Community Service Facilities: A Model and its Application," (with J. Paxton Marshall and J. Edwin Faris). Paper presented at Annual Meeting of Southern Regional Science Association, April, Washington, D.C.
- * "Dynamic Markovian Process--An Illustrative Example." Paper presented at 1974 Southern Agricultural Economics Association Meeting, February, Memphis.
- *1972 "Planning for Rural Health," (with J. Edwin Faris). Paper presented at Annual Meeting of Southern Agricultural Economics Association Meeting, February, Richmond.

Other Activities at National and Regional Meetings

- *2003 Session Chair of "Agribusiness Management" at 2003 Annual Meeting of Southeast Decision Sciences Institute, February 27, Williamsburg, Virginia.
- *2002 Discussion of "Causes of Convexity in Remaining Value Functions" by by Flenn A. Helmers and Joseph Atwood at 2002 Annual Meeting of Southeast Decision Sciences Institute, February 20, Hilton Head, South Carolina.
- * Session Chair of "Resource Issues in Agricultural Economics" at 2002 Annual Meeting of Southeast Decision Sciences Institute, February 20, Hilton Head, South Carolina.
- *1999 Discussion of "The Agribusiness Dilemma: Should We or Shouldn't We?" by Forrest Stegelin at 1999 Annual Meeting of Southeast Decision Sciences Institute, February 25, Savannah, Georgia.
- 1997 Track Chair for 1997 Annual Meeting of Southeast Decision Sciences Institute.
- 1994 Discussion of "Effect of Weather and Climatic Changes on Food Production and Distribution in W. Africa: The Case of Senegal", by Surajudeen Olowolayemo, Curtis Jolly, Neil Martin and Macki Sissoko at 1994 Annual Meeting of Southeast Decision Sciences Institute, March 3, 1994, Williamsburg.
 - Discussion of "LAN Education in the IS Curriculum: Meeting the Challenge", by Julian Riehl at 1994 Annual Meeting of Southeast Decision Sciences Institute, March 3, 1994, Williamsburg, Virginia.
- 1992 Discussion of "A Workload Balancing Optimization Model for Ambulance Location: An Application to Shanghai, P.R.C.," by Zhiwei Zhu and Mark A. McKnew at 1992 Annual Meeting of Southeast Decision Sciences Institute, February 22, 1992.
- 1991 Discussion of "TABU Search Applied to the General Fixed Charge Problem," by Minghe Sun and Patrick G. McKeown at 1991 Annual Meeting of Southeast Chapter of The Institute of

Management Sciences, October 3, 1991.

WILLIAM E. HARDY, JR.

- *1989 Served as Program Chairman for 1989 Annual Meeting of Southeast Decision Sciences Institute in Charleston, South Carolina. Was responsible for all meeting plans including coordination of the review of 180 submitted papers, preparation of Program, and editing of *Proceedings*.

 Approximately 500 hours of time was required to take care of all responsibilities.
- 1988 Discussion of "Analysis of Demand for Competing Advertising Media Services," by Warren R. Hughes at 1988 Annual Meeting of Decision Sciences Institute, November 22, Las Vegas.
- 1987 Discussion of "Discrete Production Coefficients and Factor Substitution: A Heuristic Computer Application," by Solomon Homig at Annual Meeting of Northeast Decision Sciences Institute, April 2, Atlantic City.
 - Organizer of Workshop on "Mathematical Programming Using the SAS/OR Software," at the 1987 Annual Meeting of Southeast Decision Sciences Institute, February 18, Richmond, Virginia.
- 1986 Discussion of "Managerial Political Development," by Stanley Young at 1986 Annual Meeting of Northeast American Institute for Decision Sciences, March 27, Williamsburg.
- 1985 Session Chairman of "Land Economics: Allocation and Value" at Annual Meeting of Southern Agricultural Economics Association, February, Biloxi.
- 1984 Session Chairman and Coordinator for student papers session at Annual Meeting of Southeast American Institute for Decision Sciences, February, Savannah.
- 1983 Session Chairman of "Quantitative Analysis of Business Success and Resource Allocation Problems," at Annual Meeting of Southeast American Institute for Decision Sciences, February, Williamsburg.
- 1982 Session Chairman of "Organizational Absenteeism" at Annual Meeting of American Institute for Decision Sciences, November, San Francisco.
 - Discussion of "Use of a Simulation Model of Availability in the Evaluation of Alternatives," by B. P. Langaray and Way Kiro at Annual Meeting of American Institute for Decision Sciences, November, San Francisco.
 - Discussion of "A Comment on International Business and Economics Curriculum," by C. Frampton, S. Mahmoud, and W. C. Brokaw at Annual Meeting of the Institute for Management Sciences Southeastern Chapter, October, Myrtle Beach.
- 1981 Presented Distinguished Service Award at Annual Meeting of Southeast American Institute for Decision Sciences, February 26.
- 1980 Session Chairman of "Quantitative Methods in Planning for Community Services," at workshop sponsored by Southern Rural Development Center, June 2-4.
 - Discussion of "An Analysis of Bargaining Theories Which Make Explicit Use of Economic Utility Functions," by Terry Leap at Annual Meeting of Southeast American Institute for Decision

Sciences, February, Orlando.

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- Session Chairman of "Auxiliary Industries: Finance and Transportation," at Annual Meeting of Southern Agricultural Economics Association, February, Hot Springs.
- 1979 Discussion of "Inventory Location and Retrieval," by Wade Ferguson at Annual Meeting of Southwest American Institute for Decision Sciences, March, Houston.
 - Discussion of "Applying Linear Programming to Master Scheduling," by J. Gaylord May at Annual Meeting of Southeast American Institute for Decision Sciences, February, Nashville.
 - Session Chairman of "Decision Models in the Public Sector," at Annual Meeting of Southeast American Institute for Decision Sciences, February, Nashville.
- 1978 Session Chairman of "Computer Applications for Education," at Annual Meeting of Southeast American Institute for Decision Sciences, February, Jacksonville, Florida.
- 1976 Session Chairman of "On Teaching Style," at Annual Meeting of Southeast American Institute for Decision Sciences, February, Atlanta.
- 1975 Discussion of "The Impact of Resort Homes on Local Government Revenues and the Demand for Public Services in Watauga County, North Carolina," by Paul Combs, et al. at Annual Meeting of Southern Regional Science Association, April, Atlanta.

State and Local Meetings (* denotes senior author)

- *2003 "Use and Admissibility of Expert Testimony." Invited CLE presentation presented at CLE Workshop sponsored by Lorman Education Services, Birmingham, November 12.
- * "Determining Economic Damages in Litigation." Invited presentation presented at Auburn University CLE Workshop, Auburn, November 7.
- * "Update on Expert Testimony-Rules and Cases." Invited CLE presentation presented to Lee County Bar Association, Opelika, Alabama, June 13.
- * "Use of the Expert Witness" and "Admissibility of Expert Testimony." Invited papers presented to Auburn University CLE Workshop, Auburn, June 6.
- * "Working as an Expert Witness." Invited paper presented to 2003 Alabama Section Spring Meeting of American Society of Agricultural Engineers. Auburn, March 14.
- *2002 "How Ya Gonna Keep 'Em Down on the Farm Given the Economic Perspective?" Invited paper presented at Butler/Cunningham Conference on Agriculture and the Environment, Birmingham, November 13.
- *2001 "The Use and Admissibility of Expert Witness Testimony." Continuing Legal Education program presented to Lee County Bar Association, Opelika, May 11.
- *1999 "Utilizing and Assuring Admittance of Expert Testimony." Continuing Legal Education program presented to Law Day Program of Escambia County Bar Association, Brewton, May 7.

- * "Determining Present Value In Litigation." Continuing Legal Education Program presented to Dale County Bar Association, Ozark, February 8.
- * "Working With The Expert Witness--Preparation for Deposition and Trial." Invited presentation for the Winter Seminar of the Alabama Association of Legal Assistants, Montgomery, January 30.
- *1998 "Using Expert Witnesses." Continuing Legal Education Seminar presented to Lee County Bar Association, Auburn, December 14.
- * "Expert Witness Testimony--When and How." Continuing Legal Education Seminar presented to Montgomery County Bar Association, Montgomery, November 17.
- * "Compensation for Injuries--Increased Expenses, Loss of Earnings, Lost Household Productivity and Determination of Present Value." Presented to Shelby County Bar Association, November 4.
- * "Alternative Methods for Determining Present Value in Litigation." Presented to Houston County Bar Association, Dothan, August 26.
- * "Maximizing the Effectiveness of the Expert Witness." Presented to Alabama Trial Lawyers Association Mid-Winter Conference. Birmingham, January 17.
- *1997 "How Should We Determine Present Value in Litigation?" Presented to Huntsville-Madison County Bar Association, Huntsville, AL, November 5.
- * "Use of The Expert Witness" and "Admissibility of Expert Testimony." Presented to Continuing Legal Education Seminar for Birmingham Bar Association, Birmingham, October 8.
- * "Alternative Approaches for Calculating Present Value in Litigation," Presented to Alabama Association of Legal Assistants, Birmingham, September 17.
- * "Determining Present Value. What is the Best Method to Use?" Presented to Montgomery County Bar Association, Montgomery, June 18.
- *1996 "Attitudes Relative to Chapter 12 Bankruptcy." Presented at Commercial Credit Conference of Alabama Bankers Association, Montgomery, October 10.
- *1994 "How to 'Protect' Yourself in the Classroom." Auburn University College of Agriculture Teaching Improvement Seminar, April 21.
 - "Handling Problems in the Classroom." Seminar presented on eight occasions to selected Auburn University academic departments.
- *1993 Organizer and Moderator for 1993 Auburn University GTA Workshop, September 20, 1993.
- *1992 Organizer and Moderator for 1992 Auburn University GTA Workshop, September 21, 1992.

- *1991 "The Effect of Selected Financing Alternatives on the Financial Strength of Broiler Producers," (with Paula P. Weissend). Invited paper presented at Commercial Credit Conference of Alabama Bankers Association, September 12, 1991, Birmingham.
- * "Waste Transportation Costs." Paper presented at Animal Waste Workshop, Auburn, May 2.
- *1989 "Spreadsheet Based Records Keeping Program to Assist Broiler Production Management," (with Michael D. Smith). Invited paper presented at Alabama Hatchery/Breeder Workshop, Auburn, December 12, Auburn.
 - "Outlook for Financing," (with J. Lavaughn Johnson and Patricia Duffy). Presented at workshops (Investing in the Future of Alabama Agriculture) sponsored by Alabama Chapter of Farm Managers and Rural Appraisers and Alabama Cooperative Extension Service, February 2, Auburn and February 9, Belle Mina.
- *1987 "Farm Financial Outlook Update." Presented at Meeting of Alabama Chapter of American Society of Farm Managers and Rural Appraisers, Birmingham, March 24.
- *1985 "Financial Condition of Alabama Agriculture," (with J. Stanton Smith and Laura R. Cox).

 Presented at Annual Meeting of Alabama Academy of Science, Huntsville, March 29.
- * "Financial Analysis for Agriculture." Presented at Annual Farm Management Workshop.

 Alabama Chapter of American Society of Farm Managers and Rural Appraisers, Auburn, January

 29.
- *1983 "Computer-Assisted Route Design--An Aid for Increased Efficiency and Reduced Costs." Invited paper presented to Alabama Dairy Conference, November 16.
- * "Using Financial Ratios," (with Steven F. Foshee). Invited paper presented to Tenth Annual Farm Management Workshop, Alabama Chapter of the American Society of Farm Managers and Rural Appraisers, Auburn, January 25.
- *1982 "Toward a Better Understanding of Reaganomics." Invited paper presented to Annual Meeting of Alabama Chapter of Farm and Land Institute, National Association of Realtors, Auburn, April 9.
- *1980 "Profitability Analysis for Agricultural Loans," (with M. W. Moore). Paper presented to Annual Meeting of Alabama Bankers Association, Montgomery, August 26.
- * "Minicomputers and Terminals in Planning the Agricultural Business." Paper presented to Annual Meeting of Alabama Society of Farm Managers and Rural Appraisers, January 24, Auburn.
- *1979 "Objective Credit Scoring--An Analysis of Agricultural Borrower Characteristics," (with J. B. Weed). Paper presented at Annual Meeting of Alabama Academy of Science, March, Florence. Paper was selected as outstanding presentation by student.
- * "A Comparison of the Economic Efficiency of Alternative Vehicle Routing and Scheduling Systems." Paper presented at Annual Meeting of Alabama Academy of Science, March, Florence.

1978 "The Input-Output Structure of Alabama's Coastal Economy," (with R. G. Nelson). Paper presented at Alabama Chapter of American Statistical Association, November 19, Auburn. WILLIAM E. HARDY, JR.

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- *1977 Member of panel to discuss "Characteristics of a Good Teacher," at Annual Staff Conference, December, School of Agriculture, Auburn University, Auburn.
- * "Auburn University Students' Perceptions of the Return to Their Investment in Education." Paper presented to Alabama Chapter of American Statistical Association, May 14.
- * "What's the Outlook?" Paper presented to Annual Meeting of Alabama Society of Farm Managers and Rural Appraisers, February 16, Auburn.
- *1976 "Land Management Services," (with Homer C. Daniel, Jr.). Paper presented to Alabama Chapter Farm and Land Institute, April 6, Auburn.
- * "The Use of Computers in Business Management." Invited paper presented to Alabama Agribusiness Workshop, February 17, Auburn.
- *1975 "What Does Money Cost?" Paper presented to Alabama Society of Farm Managers and Rural Appraisers, January, Auburn.
- *1974 "A Quantitative Method for Locating Economic Facilities." Paper presented to Alabama Chapter of American Statistical Association, November, Auburn.
- * "Economics of Community Development." Paper presented to 4-H Community Resource Development Conference, August, Gulf Shores, Alabama.

PROFESSIONAL CONSULTING

Prepared and presented expert witness testimony for numerous court cases.

Analyzed agricultural finance problems for agencies of Farm Credit System.

Examined agricultural finance situation for officials of American Farm Bureau Federation.

Analyzed delivery networks for various food distribution firms (Foremost-McKesson and Anheuser-Busch).

Analyzed the effects and problems associated with the transportation of coal on county roads in Alabama.

Implemented computerized record keeping and farm management analysis system.

Worked with Tuskegee Area Health Education Center in preparing proposal for Veterans Administration Grant.

Worked with meat processing firm to evaluate product costs.

MISCELLANEOUS

Married, one child, one grandchild
Born September 14, 1946 in Danville, Virginia - Excellent Health
Auburn United Methodist Church
Chairman of Finance Committee, 1999-2000
Member of Finance Committee, 1996-2001
Member of Administrative Board, 1992-1997, 1999-2000

Co-Chairman of Chancel Renovation Committee, 1996 Chairman of Worship Committee, 1992-1994 Chairman of Sound System Committee, 1992-1993 Member of Council on Ministries, 1992-1994

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Auburn Lions Club (Past Member)
President, 1984-85
Vice-President, 1981-84
Treasurer, 1980-81
Assistant Treasurer, 1979-80
Auburn High School PTA
Co-President, 1989-90
Co-Chairman, Project Graduation, 1990